

REMARKS

I. Status of the Application

The Office Action objects to the drawings under 37 CFR 1.121(d) and 37 CFR 1.83(a). The specification has been objected to because of various informalities. Claim 11 has been objected to based on certain in formalities. Appropriate corrections have been made as discussed below.

Claims 2-16 are pending in the application. Claims 2, 4, 5, 8 and 12-16 stand rejected under 35 USC 102(b) is being anticipated by UK Publication Number 2298073 to O'Neill (the '073 publication). Claims 3, 6 and 7 stand rejected under 35 USC 103(a) as being unpatentable over O'Neill in view of UK Publication Number 2372807 to O'Neill (the '807 publication) and in view of Japanese Patent Number 06290762 to Fukue ("Fukue"). Claims 9-11 stand rejected under 35 USC 103(a) is being unpatentable over the ' 073 publication in view of US Patent No. 2,984,032 to Cornell ("Cornell").

Applicant requests reconsideration based on the above amendments and the remarks that follow.

II. The Drawings

Formal drawings are being submitted herewith. The formal drawings include reference number "16a" to identify the baffle, which was shown in the original drawings and described in the specification. Accordingly, the addition of reference number "16a" does not add new matter to the application, and Applicant requests that the objections to the drawings be withdrawn.

III. The Specification

The amendments requested on page 3 and 4 of the Action have been made to address the objection to the specification. Applicant requests to the objections to this specification be withdrawn.

IV. Claim Objections

Claim 11 has been canceled, and the subject matter of Claim 11 has been incorporated into Claims 9 and 10 with appropriate modification to address the objections on page 4 of the Action. Applicant requests that the objections to the claims be withdrawn.

V. The Section 102/103 Rejections

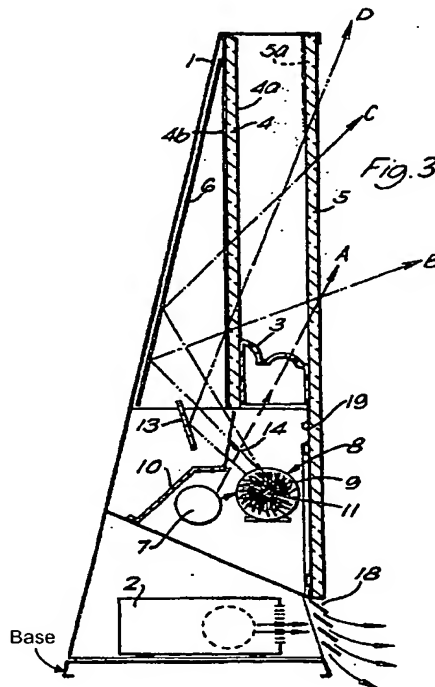
A. Independent Claim 2

Claim 2 recites a flame effect electric fire including:

- i) a housing adapted to be mounted on a substantially plane wall;
 - ii) heating means disposed in the housing operative to draw air into the housing, heat the air and expel the heated air; and
 - iii) a flame simulating assembly mounted in the housing and comprising:
 - (a) a light source;
 - (b) a viewing screen capable of diffusing and transmitting light;
 - (c) a rear reflecting means disposed behind the viewing screen;
- and
- (d) means for producing moving beams of light, wherein the light source is disposed below the reflecting means and behind the viewing screen, the means for producing moving beams of light is disposed in front of the light source and below the screen and light from the light source is reflected by the means for producing moving beams of light onto the reflecting means and is reflected by the reflecting means onto the screen to produce a perceptible image viewable on the screen, and wherein the heating means expels air in a generally vertically downward direction through an underside external panel of the housing.

As noted above, Claim 2 stands rejected under § 102(b) based on the '073 publication. In response, Claim 2 its been amended to recite that the heating means expels air in a generally vertically downward direction through an underside external panel of housing. Support for this amendment can be found, for example, in **Figures 2 and 3** and in paragraph 51 of the published application (US Publication No. 2006/0153547).

In contrast, the '073 publication proposes an apparatus for simulating flame in which a fan heater 2 is configured to expel heated air in a generally horizontal direction through a grill 18 on a side of the apparatus (see **Figure 3**). Therefore, the '073 publication does not teach or suggest a heating means that expels air in a generally vertically downward direction through an underside external panel of the housing as recited in Claim 2.



In addition, the apparatus in the '073 publication is configured to rest on the ground, such as in a fireplace. As shown in **Figure 3**, the apparatus rests on a base (labeled "Base" by Applicant). In this configuration, the clearance between the apparatus and the underlying supporting floor appears to be insufficient for the downward expulsion of the heated air. Modifying the apparatus of the '073 publication so that the fan would expel air in a vertically downward direction would appear to be unsafe because the apparatus rests on the ground.

The features of Claim 2 discussed above are also not taught or suggested by the '807 publication, Fukue or Cornell.

For at least these reasons, the recitations of Claim 2 are not taught or suggested by the art cited in the Action. Claims 3-9, 12, 14, 15 and 17 depend indirectly or directly from

Claim 2 and are patentable over the cited are very least the reasons discussed above.

Accordingly, Applicant requests that the rejections under Sections 102/103 be withdrawn.

In addition, various claims depending from Claim 2 are separately patentable for at least the reasons discussed below.

B. Dependent Claim 5

Claim 5 depends from Claim 2 and is patentable for least the reasons discussed with respect to Claim 2. Claim 5 is additionally patentable for the following reasons.

Claim 5 has been amended to clarify that the additional reflector is disposed on a side of the light source opposite the rear reflecting means. Applicant submits this feature is not taught or suggested by the '073 publication.

The Action apparently takes the position that the auxiliary reflector 13 of the '073 publication is equivalent to the additional reflector recited in Claim 5. In the '073 publication, the auxiliary reflector 13 is positioned on the same side of the light source 7 as the reflector 6 so that the reflector 13 reflects the beams at a steeper angle onto the screen 4. Therefore, the '073 publication does not disclose an additional reflector that is disposed on a side of the light source opposite the rear reflecting means.

In addition, in the configuration of the '073 publication, the different paths C, D of light from the rear reflector 6 and the auxiliary reflector 13, respectively, allow the light to be viewed by viewers at different distances with respect to the apparatus. See the '073 publication, Abstract, and page 9, lines 2-15. A reflector on the side of the light source opposite the reflector 6 would apparently not serve this function, and therefore, there is no motivation to modify the '073 publication to position the auxiliary reflector 13 on the side of the light source 7 opposite the reflector 6.

The recitations of Claim 5 are also not taught or suggested by the '807 publication, Fukue or Cornell.

Accordingly, Applicant submits that the recitations of Claim 5 are separately patentable for least the reasons discussed above, and respectfully requests an indication of same.

C. Dependent Claim 9

Claim 9 depend indirectly from Claim 2, and is therefore patentable for least the reasons discussed with respect to Claim 2. In addition, Claim 9 is separately patentable for at least the reasons discussed below.

Claim 9 stands rejected under § 103 as being unpatentable over the '073 publication in view of Cornell. Claim 9 has been amended to include generally the recitations of Claim 11 (also rejected in the Action under § 103 is being unpatentable over the '073 publication in view of Cornell). In particular, Claim 9 recites a shaft that

is driveably connected at a first end thereof via a flexible bushing to a drive means operative to rotate the shaft and is releasably retained at a second end thereof in a supporting bracket, the shaft being displaceable from its operative position on release of its second end by flexure of the flexible bushing, thereby to permit access to the light source.

Accordingly, the second end of the shaft is releasably retained in the supporting bracket. In this configuration, the second end of the shaft can be displaced from the bracket so that the shaft can be moved by flexure of the flexible bushing.

In contrast, Cornell proposes a resilient sleeve 40 adjacent to the motor and of the shaft. Column 2, line 35 of Cornell discusses that the shaft is journaled in a suitable bearing 36 in a supporting leg 26 of the described apparatus. There is, therefore, no teaching that the second end of the shaft opposite a flexible bushing is releasably retained in a bracket. Although Cornell considers disconnecting the shaft at the resilient sleeve 40, Cornell does not disclose a flexible bushing at a first end of the shaft and a second end of the shaft that is releasably retained in the bracket as recited in Claim 9. In fact, Cornell discusses that the resilient sleeve 40 is provided to make it easier to disconnect the shaft at the end adjacent the resilient sleeve 40. Cornell, column 2, lines 40-44. Therefore, Cornell teaches away from disconnecting the shaft in the second end opposite the resilient sleeve 40.

The recitations of Claim 9 are also not taught or suggested by the '807 publication or Fukue.

Accordingly, Applicant submits that Claim 9 is separately patentable for at least the reasons discussed above, and respectfully requests an indication of same.

D. Independent Claim 10

Claim 10 recited an apparatus for producing a visual effect for simulating flames including:

- i) a light source;
- ii) a simulated fuel bed;
- iii) a viewing screen mounted about the fuel bed capable of diffusing and transmitting light and comprising a partially reflective front surface whereby an image of the fuel bed may be seen in the viewing screen;
- iv) means for producing moving beams of light, wherein:
 - a) light from the light source is reflected by the means for producing moving beams of light directly and/or indirectly onto the viewing screen to produce a perceptible image viewable on the screen; and
 - b) the means for producing moving beams of light comprises a shaft mounted for rotation about its axis and having a reflective material mounted thereon for reflecting light from the light source, the shaft is driveably connected at a first end thereof via a flexible bushing to a drive means operative to rotate the shaft and is releasably retained at a second end thereof in a supporting bracket, the shaft being displaceable from its operative position on release of its second end by flexure of the flexible bushing, thereby to permit access to the light source.

Claim 10 has been amended to incorporate the subject matter of Claim 11, which was rejected in the Action under § 103 as being obvious over the '073 publication in view of Cornell.

As recited in amended Claim 10, the second end of the shaft is releasably retained in the supporting bracket. In this configuration, the second end of the shaft can be displaced from the bracket so that the shaft can be moved by flexure of the flexible bushing.

As discussed with respect to Claim 9, Cornell proposes a resilient sleeve 40 adjacent to the motor and of the shaft, which is journaled in a suitable bearing 36 in a supporting leg 26. Therefore, Cornell does not teach or suggest that the second end of the shaft is releasably retained in a bracket for substantially the same reasons as discussed with respect to Claim 9, which are not repeated here for brevity.

For at least these reasons, Applicant submits that the recitations of Claim 10 are not taught or suggested by the '073 publication and/or Cornell. Accordingly, Applicant requests that the rejection of Claim 10 under § 103 be withdrawn.

E. Newly Added Dependent Claims 17-18

Claims 17-18 depend from Claim 2 and Claim 10, respectively, and recite "a mounting means for mounting the flame effect fire on a wall." Support for Claims 17-18 can be found, for example, paragraph 2 of the application. The apparatus of the '073 publication is a floor mounted apparatus for simulating flames. As can be seen in **Figure 3** of the '073 publication, the rear panel and rear reflector 6 of the apparatus is inclined relatively far away from a vertical axis, and therefore is apparently not suitable for mounting on a substantially planer wall without special mounting arrangements, which are clearly not disclosed in the '073 publication. The '073 publication makes no mention of mounting the apparatus on a wall or other vertical surface.

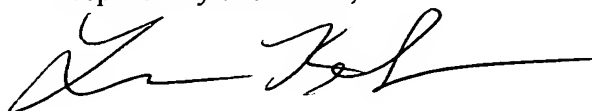
For at least these reasons, the '073 publication does not teach or suggest a mounting means for mounting flame effect fire on a wall as recited in Claims 17-18. The recitations of Claims 17-18 are also not taught or suggested by the '807 publication, Fukue or Cornell.

Claims 17-18 are therefore separately patentable, and Applicant respectfully requests an indication of same.

CONCLUSION

Accordingly, Applicant submits that the present application is in condition for allowance and the same is earnestly solicited. The Examiner is encourage to telephone the undersigned at 919-854-1400 for resolution of any outstanding issues.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Laura M. Kelley', with a long horizontal flourish extending to the right.

Laura M. Kelley
Registration No.: 48,441

Attorney Docket No. 9052-218
Application Serial No. 10/528,711
Filed: October 18, 2005
Page 15

USPTO Customer No. 20792
Myers Bigel Sibley & Sajovec
Post Office Box 37428
Raleigh, North Carolina 27627
Telephone: 919/854-1400
Facsimile: 919/854-1401

Certificate of Mailing under 37 CFR § 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 9, 2007.


Carey Gregory